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| CHAPTER 1  **Biology: Exploring Life** |  |
| OBJECTIVES |  |

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|  | **The Scope of Biology** | | |
| 1.1 | Define the levels of biological organization from molecules to the biosphere, noting the relationship  each level has to the others. |  |  |
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| 1.2 | Compare the flow of chemical nutrients and the flow of energy in an ecosystem. |  |  |
| 1.3 | Explain how cells are the structural and functional units of life. Compare prokaryotic and eukaryotic cells. |  |  |
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|  | **Evolution, Unity, and Diversity** | | |
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| 1.4 | Describe seven properties that are common to all life. |  |  |
| 1.5 | Compare the three domains of life. Distinguish between the three multicellular kingdoms within Eukarya. |  |  |
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| 1.6 | Describe the process and products of natural selection. |  |  |
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|  | **The Process of Science** | | |
| 1.7 | Describe the goals and limits of scientific investigations. Compare discovery science and hypothesis-based science. |  |  |
| 1.7 | Define a hypothesis, and compare inductive and deductive reasoning. |  |  |
| 1.8 | Explain how deductive reasoning is part of hypothesis-based science. |  |  |
| 1.8 | Define a control, and describe an example. |  |  |
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